

FIRE LOSSES IN BRITISH COLUMBIA IN 1982

Published by

Office of the Fire Commissioner



**Province of
British Columbia**

**Ministry of
Attorney General**

22

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British Columbia

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FIRE LOSSES IN 1982

Seventy-three persons died and 375 were injured as a result of 7,623 fires in 1982, causing a total dollar loss of \$157,296,688. The losses for the last four years have been as follows:

Year	No. of Fires	\$ Loss (Millions)	\$ Loss (Millions) Adjusted for Inflation to 1981 Constant \$	Number Injured	Number Dead
1982	7,623	157.3	142.4	375	73
1981	7,021	115.7	115.7	244	76
1980	7,661	108.7	124.2	305	89
1979	7,656	105.9	132.4	444	125

The average loss per fire for the province in 1982 was \$20,634 and the per capita loss was \$57.31. There was an average of 2.78 fires for every 1,000 persons in British Columbia.

Fire Fatalities

Thirty-six men, 24 women and 13 children lost their lives as a result of fire last year. Eleven of these 73 deaths occurred on Indian reserves.

- All 13 children that died from fire were 8 years old or younger.
- About 30% of fire deaths were in the over 60 age group, although this age group comprises only 15% of the province's population.
- 25 fire fatalities resulted from careless smoking, and 12 of these were over the age of 60.
- At least 8 persons who died were impaired by alcohol, drugs or medication.
- 4 persons were killed as a result of set fires.
- 27 persons who died from fire were asleep at the time of the fire.

Residential Fires

Thirty-four percent of fires were in one- and two-family dwellings, resulting in a total loss of \$46.8 million. A further 7.3 percent of the fires were in apartment buildings with a loss of \$6.6 million. These two residential categories accounted for 41.3 percent of the total number of fires and 34 percent of the total 1982 fire losses in the province.

Sixty-three of the 73 fire fatalities, or 86%, occurred in residential fires, including hotels and mobile homes. Thirty-five of the 38 fire deaths in single family dwellings and 11 of the 13 fire deaths in apartment buildings, occurred between 10 p.m. and 7 a.m.

The fire experience in single family dwellings and apartment buildings indicates significant differences between the two groups. See chart below. Asterisks highlight differences.

Comparison of Single Family Dwelling and Apartment Fire Incidents		
	Single Family	Apartment Building
<u>Cooking Fires</u>	639	110
As a percentage of all fires in property group	24.6%	19.7%
As a percentage of total \$ loss in property group	12.5%	15.9%
No. of fatalities over total in property group	3/38	0/13
<u>Heating Equipment Fires</u>	569	23
As a percentage of all fires in property group	21.9%	4.1% *
As a percentage of total \$ loss in property group	23.8%	3.8% *
No. of fatalities over total in property group	2/38	0/13
<u>Smokers Material Fires</u>	259	145
As a percentage of all fires in property group	9.8%	26% *
As a percentage of total \$ loss in property group	9.7%	16.8%
No. of fatalities over total in property group	0/38	11/13 *
<u>Arson Fires</u>	262	139
As a percentage of all fires in property group	10.1%	24.9% *
As a percentage of total \$ loss in property group	13.8%	27.4% *
No. of fatalities over total in property group	1/38	2/13

Heating equipment fires accounted for almost 22% of the fires in single family dwellings, but only 4% in apartment building fires.

Of all heating equipment fires in single family dwellings, over 70% were related to the use of solid-fuel. The igniting objects (sources of ignition) for these solid-fuel fires were:

<u>Igniting Object</u>	<u>Fires</u>	<u>Injuries</u>	<u>Dead</u>	<u>\$ Loss</u>
Central heating unit	15			576,854
Space heater	79	3	1	1,647,894
Fireplace	139			1,828,842
Masonry chimney	70	1		1,311,986
Factory-built metal chimney	71	1		1,590,882
Flue connector	19			284,431
Heating equipment - other	14			409,175
TOTAL	487	5	1	7,650,064

Of these 407 fires, 190 were attributed to construction, design or installation deficiencies, 66 were blamed on human failing, eg. ignorance of hazard.

Smokers materials accounted for about 10% of single family dwelling fires but 26% for apartment fires. Smokers material accounted for only 21% of the fatalities in single family dwellings, but 85% of the fatalities in apartments.

The rate of arson in apartment buildings was two-and-one-half times higher than that in single family dwellings.

Educational Institutions

There were 77 fires in educational institutions in 1982 resulting in a loss of over \$3.6 million. The number of fires in educational institutions have been reducing since 1979.

<u>Year</u>	<u>Number</u>	<u>\$ Loss (Million)</u>	<u>\$ Loss (Million) Adjusted by C.P.I.</u>
1982	77	3.6	3.3
1981	84	1.8	1.8
1980	94	8.3	9.5
1979	125	9.3	11.6

Although fire losses in educational institutions are generally down from the high of 1979, it should be noted that in 1982, 99% of the dollar losses in such fires were the result of arson.

Automobile Fires

There were 1,591 automobile fires in British Columbia in 1982. These fires accounted for 21 percent of the number of fires in 1982, causing a loss of about \$3.2 million.

Large Loss Fires

There were 84 fires in which the individual losses exceeded \$250,000 each. Although they accounted for only 1.0 percent of the total fires, they were responsible for losses of \$61.4 million, constituting 39 percent of the province's annual dollar losses. Forty-four percent of the fires in this large loss category were 'set' fires causing a loss of \$29.4 million.

Arson

1,465 fires out of the total 7,623 (19.2%) fires in 1982 were deliberately set causing a loss of \$49.3 million (31% of dollar losses). In 1981, 1,521 or 21.7% of total fires were 'set' and caused a loss of \$40.7 million.

Contrary to popular speculation, the number of arson fires was actually down in 1982 from 1981. The dollar losses from arson, on the other hand, present a different picture. Arson losses last year reached \$49.3 million (31% of total fire losses). In 1981 arson losses were \$40.6 million (35% of total fire losses); however that figure included \$10 million estimated for the fire at the Matsqui prison. If one were to exclude that one fire, 1981's arson loss would have been \$30.6 million (29% of total fire losses), and 1982's arson losses would then have been over 60% greater than 1981!

647 of the 1,465 (44%) arson incidents were classified as vandalism or mischief. This category has historically accounted for the bulk of arson incidents. A breakdown of the arson incidents is as follows:

<u>Act of Omission</u>	<u>Incidents</u>	<u>Injured</u>	<u>Dead</u>	<u>\$ Loss (million)</u>
Arson for financial gain	28			3.4
Arson as a cover-up crime	225	4		11.1
Arson for revenge, spite	47	5		1.3
Arson - mental disorder, suicide	23	6		0.3
Arson - vandalism, mischief	647	6		12.5
Arson - riot, intimidation	13			.06
Arson - motive unknown	226	7		5.4
Suspected Arson - motive unknown	256	19	4	15.3
Arson Total	1465	47	4	49.3

Unfortunately, the category that gets the maximum media attention - arson for financial gain - is also the one that is most difficult to prove and therefore many of those incidents may actually have been listed as 'Arson-motive unknown'.

The rate of arson varies widely from property group to property group. The rate is highest in educational institutions (79%) and nil in homes for the aged. There has been no major change in the distribution of arson fires.

The frequency of arson is heaviest in the urban areas: 35% of fires in Vancouver (city) were arson compared to 11% in the Kootenays and the northern region.

The period from 11 p.m. to 5 a.m. was busiest for arsonists and fires set in this period caused 73% of all arson losses.

Gordon R. Anderson
Fire Commissioner

**FIRE LOSSES IN MUNICIPAL AND NON-MUNICIPAL
AREAS - BRITISH COLUMBIA, 1982**

	Incident	\$ Loss	Injured	Dead		Incidents	\$ Loss	Injured	Dead
CITIES									
Armstrong	6	5,336	--	--	Nelson	32	1,124,541	1	--
Castlegar	13	1,173,000	--	--	North Vancouver	123	904,567	7	--
Courtenay	37	760,497	--	--	New Westminster	178	3,874,481	13	5
Cranbrook	27	416,953	--	--	Port Alberni	70	507,789	4	--
Dawson Creek	27	338,400	--	--	Port Coquitlam	77	789,848	1	--
Duncan	31	273,563	4	--	Penticton	74	1,100,338	3	--
Enderby	4	130,547	--	--	Prince George	260	2,000,145	--	3
Fernie	19	1,354,070	8	--	Port Moody	28	130,861	--	--
Grand Forks	7	145,248	--	--	Prince Rupert	24	698,453	3	?
Greenwood	1	2,684	1	--	Quesnel	53	462,348	--	--
Fort St. John	37	477,636	5	1	Revelstoke	24	864,854	--	1
Kamloops	216	1,827,460	11	2	Rossland	8	22,050	--	--
Kelowna	105	2,508,130	6	1	Trail	15	222,854	--	--
Kitimat	23	137,101	1	1	Vancouver	1,214	17,256,820	90	8
Langley	78	1,234,649	10	--	Vernon	51	1,308,222	--	--
Merritt	26	226,014	--	2	Victoria	232	3,454,961	12	1
Nanaimo	163	1,647,777	6	--	Williams Lake	43	1,301,776	2	1
					White Rock	17	1,220,493	3	--
DISTRICTS									
Abbotsford	62	721,282	--	2	New Hazelton	5	120,660	--	--
Burnaby	375	3,451,251	23	5	North Saanich	19	244,208	1	--
Campbell River	23	296,157	6	1	North Vancouver	162	2,010,541	5	--
Central Saanich	13	151,574	--	3	Oak Bay	28	102,015	1	--
Chilliwack	101	3,065,321	1	3	Peachland	12	320,402	--	--
Coldstream	9	237,400	--	--	Port Hardy	19	1,622,681	1	--
Coquitlam	130	1,254,072	1	--	Pitt Meadows	17	490,058	--	--
Delta	139	1,592,963	8	--	Powell River	20	110,412	2	--
Elkford	9	361,251	--	--	Richmond	207	4,436,687	7	1
Esquimalt	14	172,421	--	--	Saanich	128	584,153	8	1
Hudson Hope	5	36,008	--	--	Sparwood	21	313,489	1	--
Houston	15	1,025,333	1	--	Summerland	11	202,067	--	--
Kent	4	74,324	--	--	Salmon Arm	53	386,335	3	--
Kitimat	51	1,749,591	9	--	Spallumcheen	6	136,000	--	--
Langley	101	1,183,393	7	2	Squamish	34	947,304	6	--
Mackenzie	25	71,215	--	--	Surrey	317	6,711,061	4	2
Mission	48	1,647,320	3	--	Terrace	37	569,934	2	--
Maple Ridge	94	1,461,066	7	--	Tumbler Ridge	2	98,154	--	--
Matsqui	105	965,874	12	--	Whistler	9	2,030,251	--	--
North Cowichan	19	446,196	--	2	West Vancouver	66	791,041	3	--
TOWNS									
Comox	22	621,564	1	--	Parksville	14	74,102	--	1
Creston	14	29,947	--	--	Princeton	5	3,134,828	--	--
Golden	4	27,702	--	--	Sidney	15	51,787	--	1
Hope	2	15,000	--	--	Smithers	17	272,010	--	--
Ladysmith	15	115,000	--	--					
VILLAGES									
Alert Bay	1	85,000	--	1	Makusp	3	338,166	--	--
Ashcroft	10	220,642	1	--	Oliver	3	39,354	--	--
Burns Lake	2	13,700	--	--	Osoyoos	8	429,290	--	--
Cache Creek	2	34,194	--	--	Pouce Coupe	2	38,000	--	--
Chetwynd	1	141,000	--	--	Port Edward	4	45,000	--	1
Chase	3	12,560	--	--	Pemberton	10	78,800	--	--
Cumberland	3	40,417	--	--	Port Clements	2	342,688	--	--
Fraser Lake	3	26,050	--	--	Port McNeill	5	131,796	--	--
Fort Nelson	24	330,294	4	--	Port Alice	3	34,400	--	--
Fruitvale	1	65,000	--	--	Qualicum Beach	3	5,532	--	--
Granisle	2	39,120	--	--	Salmo	2	40,091	--	--
Gibsons	13	130,560	1	1	Sayward	4	21,800	--	--
Gold River	2	149,638	--	--	Sechelt	10	66,380	--	1
Harrison Hot Springs	3	53,151	--	--	Silverton	1	27,628	--	--
Hundred Mile House	9	176,500	--	--	Fort St. James	3	112,363	--	--
Invermere	4	5,724	--	--	Slocan	1	50,000	--	--
Kaslo	7	30,200	4	--	Tahsis	6	965,575	--	--
Keremeos	15	144,623	--	--	Telkwa	1	15,500	--	--
Lions Bay	1	500	--	--	Tofino	4	102,077	--	2
Lake Cowichan	2	2,000	--	--	Taylor	8	845,008	--	--
Lillooet	4	165,182	--	--	Ucluelet	4	33,045	--	--
Logan Lake	1	20,000	2	--	Valemount	5	18,050	--	--
Lumby	8	413,400	--	--	Vanderhoof	9	323,664	--	--
Lytton	2	287,342	--	--	Warfield	3	66,000	--	--
Nasaset	3	264,000	--	--	Zeballos	1	500	--	--
McBride	4	17,500	--	--					

Incident	\$ Loss	Inured	Dead	Incidents	\$ Loss	Inured	Dead		
NON-MUNICIPAL AREAS IN REGIONAL DISTRICTS									
Alberni-Clayoquot	36	768,690	--	1	Greater Vancouver	32	375,350	--	--
Bulkely-Nechako	71	2,828,762	2	1	Kitimat-Stikine	42	1,269,849	--	1
Capital	111	1,671,372	8	--	Kootenay-Boundary	26	654,401	--	--
Cariboo	131	3,169,008	3	--	Mount Waddington	7	366,258	--	--
Central Coast	5	1,245,415	--	--	Nanaimo	69	7,380,987	2	1
Cent. Fraser Valley	3	79,000	--	--	North Okanagan	43	920,721	4	--
Central Kootenay	59	1,689,192	2	--	Okan-Similkameen	31	546,291	--	--
Columbia-Shuswap	64	4,712,770	11	2	Peace River-Liard	154	5,938,668	1	2
Central Okanagan	40	2,411,889	1	--	Powell River	15	83,474	--	--
Comox-Strathcona	64	2,952,175	2	--	Skeena-Qn. Charlotte	17	980,780	--	--
Cowichan Valley	54	2,139,404	2	1	Squamish-Lillooet	26	688,476	--	--
Dewdney-Alouette	14	478,242	--	--	Stikine	6	144,035	--	--
East Kootenay	58	1,938,904	5	1	Sunshine Coast	26	975,058	--	--
Fraser-Cheam	46	1,215,409	2	--	Thompson-Nicola	94	2,782,318	2	5
Fraser-Ft. George	78	3,412,895	2	--					

FIRE LOSSES AND CASUALTIES BY MONTH, 1981

Month	Fires	\$ Loss	Injured	Dead
January	684	19,580,568	44	11
February	627	15,155,078	23	2
March	605	10,695,368	38	7
April	665	12,646,609	26	6
May	690	18,997,313	39	9
June	699	14,419,728	32	6
July	584	9,683,014	24	4
August	622	12,009,147	26	7
September	587	11,927,165	26	6
October	676	10,274,865	25	2
November	586	10,578,101	33	10
December	598	11,329,732	39	3
TOTALS	7,623	157,296,688	375	73

FIRE LOSS STATISTICS FOR ALL FIRES, 1982

	Incidents	Injured	Dead	\$ Loss
<u>ACT OR OMISSION</u>				
<u>Incendiary or Set Fires</u>				
Arson or Set Fire, Financial Gain	28	--	--	3,415,609
Arson or Set Fire, Cover-up Crime	225	4	--	11,137,953
Arson or Set Fire, Political, Religious, Riot, Civil Commotion	7	--	--	32,560
Arson or Set Fire, Revenge, Spite	47	5	--	1,306,348
Arson or Set Fire, Mental Disorder, Attempted Suicide, Suicide	23	6	--	265,493
Arson or Set Fire, Vandalism, Mischief	647	6	--	12,487,414
Arson or Set Fire, Intimidation	6	--	--	26,814
Arson or Set Fire, Motive Unknown or Unclassified	226	7	--	5,414,124
Suspected Set Fire, Motive Unknown or Unclassified	256	19	4	15,255,766
<u>Misuse of Source of Ignition</u>				
Smokers' Material	557	38	18	6,568,992
Thawing	25	3	--	822,541
Inadequate Control of "Open" Fire	88	2	--	1,473,079
Child Playing With	142	14	3	1,484,025
Welding or Cutting too Close	51	4	--	659,245
Torch too Close	39	1	--	777,169
Misuse of Source of Ignition, Unclassified	87	3	1	747,771
<u>Misuse of Material Ignited</u>				
Fuel Spilled Accidentally	39	5	--	792,298
Improper Fuelling Technique	28	7	--	457,976
Flammable Liquid to Kindle Fire	13	4	--	217,309
Cleaning, Washing Parts	9	3	1	184,135
Improper Container, Metal	4	--	--	12,739
Improper Container, Plastic	6	--	--	146,300
Combustible Placed too Close to Heat	112	2	1	2,105,441
Improper Storage	37	3	--	612,361
Misuse of Material Ignited, Unclassified	51	4	--	2,132,204
<u>Mechanical and Electrical Failure</u>				
Part Failure, Leak, Break	800	20	--	3,753,287
Automatic Control Failure	70	4	--	591,056
Manual Control Failure	8	2	--	81,700
Electrical Short Circuit	668	17	6	7,764,480
Part Worn Out	16	2	--	46,873
Mechanical or Electrical Failure, Unclassified	358	7	--	4,718,386
<u>Construction, Design or Installation Deficiency</u>				
Design Deficiency	34	1	--	551,956
Construction Deficiency	71	--	1	757,930
Installed too Close to Combustible	137	3	--	2,716,945
Other Installation Deficiency	45	2	1	761,128
Overfusing	1	--	--	30,987
Suspected Faulty Connections Involving Aluminum Wiring	2	--	--	1,500
Suspected Faulty Connections Involving Copper Wiring	13	--	--	136,208
Construction, Design or Installation Deficiency, Unclassified	54	1	--	1,706,418
<u>Misuse of Equipment</u>				
Overfuelling	13	--	--	140,789
Misuse of Equipment, Unclassified	58	3	--	540,858
<u>Human Failing</u>				
Asleep	47	12	1	602,154
Temporary Loss of Judgement Suspected (Includes Panic)	17	3	--	107,102
Physical or Mental Disability	17	3	--	200,552
Accident	208	12	2	1,774,104
Suspected Impairment by Use of Alcohol, Drugs or Medication	49	11	4	726,163
Asleep, Suspected Use of Alcohol, Drugs or Medication	29	6	6	482,585
Ignorance of Hazard	289	26	2	3,168,490
Distracted, Preoccupied	236	15	--	1,246,197
Human Failing, Unclassified	159	16	3	3,627,472

FIRE LOSS STATISTICS FOR ALL FIRES, 1982

	Incidents	Injured	Dead	\$ Loss
<u>ACT OR OMISSION (con't)</u>				
<u>Vehicle Accident</u>				
Automobile	37	--	--	394,977
Industrial Truck	5	--	--	236,000
Other Road Vehicle	5	--	--	62,700
Watercraft	6	1	1	184,110
Vehicle Accident, Unclassified	9	--	--	275,454
<u>Miscellaneous Act or Omission</u>				
Act or Omission Unknown	1,210	66	18	46,379,187
Miscellaneous Act or Omission, Unclassified	199	2	--	4,993,274
<u>FORM OF HEAT</u>				
Spark, Ember	328	18	1	7,366,693
Spark, Electrical	1,256	42	6	12,688,266
Spark, Static Electrical	61	2	1	1,270,198
Direct Flame	1,885	101	9	32,289,160
Friction Heat	54	4	--	603,847
Hot Object, Direct Heat by Conduction or Radiation	1,515	67	6	22,201,251
Spontaneous Ignition	89	5	2	1,525,961
Heat from Smokers' Material	610	55	23	7,346,180
Form of Heat Unknown	1,726	77	25	71,029,693
Form of Heat Unclassified	99	4	--	975,436
<u>FIRE SERVICE</u>				
Full Time Fire Department	3,126	180	21	46,722,161
Volunteer Fire Department	978	46	18	33,073,293
Combined Full Time and Volunteer Fire Dept.	2,465	132	25	46,853,361
Police Acting as Full Time Fire Fighters	17	--	--	109,504
Combined Police and Fire Department	5	--	--	123,527
Combined Police and Volunteer Fire Fighters	19	--	--	1,188,769
Fire Service, Contract to Others	8	--	--	166,596
No Fire Service	560	14	7	21,606,240
Fire Service Unknown	401	1	1	3,164,444
Fire Service, Unclassified	44	2	1	4,288,793
<u>FUEL OR ENERGY (Relating to Igniting Object)</u>				
Coal, Wood	1,194	34	4	26,773,385
Fuel Oil	125	3	--	3,909,182
Gasoline	1,147	26	3	6,766,956
Natural Gas or Other Fuel Gases	378	75	4	9,238,648
Cigarette, Cigar, Pipe, Match, Lighter	966	70	28	13,657,723
Electricity	1,734	81	11	17,558,284
Lightning	17	--	--	363,077
Exposure Fire	219	--	--	3,101,134
Fuel or Energy Unknown	1,439	59	20	63,846,955
Fuel or Energy, Unclassified	404	27	3	12,081,344
<u>LEVEL OF ORIGIN</u>				
Basement, Sub-basement	530	38	2	18,353,222
Crawl Space, Under Structure	88	14	2	3,492,916
Ground Floor, Grade Level	2,940	170	43	74,504,530
2nd Storey	508	75	11	15,250,063
3rd Storey	122	13	5	3,696,214
4th to 12th Storey, Inclusive	77	5	2	485,517
Over 12 Storeys	17	3	1	71,359
Roof Level, Includes Concealed Roof Space, Attic	210	7	--	5,585,761
Level of Origin Unknown	439	4	1	11,880,633
Level of Origin, Not Applicable	2,692	46	6	23,976,473

FIRE LOSS STATISTICS FOR ALL FIRES, 1982

	Incidents	Injured	Dead	\$ Loss
MATERIAL FIRST IGNITED				
Roof Covering, Wood	110	4	--	2,065,891
Roof Covering, Other than Wood	23	--	--	134,755
Exterior Wall Covering, Surface, Finish	151	1	--	1,849,997
Exterior Trim and Apportance	39	2	--	1,048,832
Floor Covering, Wood	65	1	--	1,348,619
Floor Covering, Linoleum, Tile, Plastic	29	1	--	682,952
Floor Covering, Carpet, Rug	167	8	1	3,170,794
Structural Component, Floor, Ceiling, Roof	147	9	--	4,528,781
Structural Component, Wall	96	1	2	2,695,089
Interior Wall Covering, Wood, Fibreboard (High Density)	208	10	1	6,302,478
Interior Wall Covering: Fibreboard (Low Density)	43	--	1	4,051,951
Interior Wall Covering, Plastic	25	--	--	242,205
Ceiling Covering, Wood, Fibreboard (High Density)	37	--	--	936,368
Ceiling Covering, Fibreboard (Low Density)	12	--	--	214,155
Ceiling Covering, Plastic	1	--	--	100
Insulation, Wood Product	40	2	--	698,999
Insulation, Plastic	38	--	--	420,567
Insulation, Mineral	24	1	--	507,877
Structural Components, Finish Materials, Unclassified	44	2	--	528,920
Furniture (Upholstered)	409	32	16	4,638,941
Furniture, Wood (Not Upholstered)	55	3	4	639,493
Furniture, Plastic (Not Upholstered)	3	1	--	40,600
Ironing Board	1	--	--	3,800
Matress, Pillow	132	5	4	938,680
Bedding	218	34	12	2,777,086
Drapery	43	2	--	488,363
Broom, Mop, Brush	7	--	--	17,825
Furniture, Furnishings, Unclassified	19	1	1	271,196
Clothing, Cotton, on a Person	29	2	--	352,872
Clothing, Wool, on a Person	4	1	--	198,683
Clothing, Synthetic Fibre, on a Person	60	7	1	1,836,673
Fabric, Cotton	38	2	--	583,528
Fabric, Wool	2	--	--	1,110
Fabric, Synthetic Fibre	29	--	-0	440,266
Fur	1	--	--	4,000
Tarpaulin	18	--	--	30,796
Clothing, Textiles, Unclassified	30	--	--	303,543
Wood	102	1	--	3,582,122
Wood Shavings	48	4	--	653,479
Paper, Packing Material	78	1	1	1,395,377
Paper Decoration	15	--	--	306,814
Wastepaper	141	8	1	1,634,512
Cardboard	72	7	2	2,414,403
Paper Stock	153	8	1	3,850,122
Wood, Paper Products, Unclassified	101	2	--	5,736,678
Gasoline	1,003	25	--	5,906,788
Fuel Oil	74	5	1	1,909,179
Combustible Liquid, Flashpoint 100F and Over	53	2	--	8,079,225
Flammable Liquid, Flashpoint Less than 100F	43	9	1	1,534,264
Paint, Varnish	17	1	--	152,228
Cooking Oil, Fat	444	38	2	2,274,151
Tar, Asphalt	6	--	--	101,798
Polish, Wax	14	3	--	87,586
Flammable Liquids, Unclassified	115	4	--	1,121,207
Natural Gas	12	2	--	382,263
Propane/Butane Air Mixture	26	14	--	456,540
Propane, Butane, L.P.G.	54	13	1	2,882,576
Acetylene	11	--	--	14,700
Hydrogen	1	--	--	20,000
Flammable Gases Unclassified	19	7	1	186,820
Cellulose Nitrate	6	--	--	74,962
Plastics	126	6	1	457,190
Magnesium and Alloys	1	--	--	75,000
Rubber, Natural or Synthetic	45	--	--	370,088
Ammonium Nitrate	2	--	--	1,385
Chemicals, Unclassified	15	3	--	91,814

FIRE LOSS STATISTICS FOR ALL FIRES, 1982

	Incidents	Injured	Dead	\$ Loss
<u>MATERIAL FIRST IGNITED (con't)</u>				
Fibres	13	1	--	219,136
Grain, Flour, Starch	10	--	--	59,208
Hay, Straw	47	1	--	833,375
Tree, Shrub	66	--	--	175,910
Felled Timber	4	--	--	12,854
Grass, Brush, Leaves	40	1	--	185,674
Fertilizer, Manure	2	--	--	22,500
Christmas Tree	11	1	1	201,901
Agricultural, Forestry Products, Unclassified	9	--	--	210,983
Coal, Coke	8	--	--	3,805
Insulation, Electric	502	13	--	2,862,327
Garbage, Trash, Rubbish	162	5	--	2,040,833
Oily Rags	23	1	--	224,363
Miscellaneous Material, Unclassified	176	1	--	1,760,969
Material First Ignited Unknown	1,356	56	17	57,732,704
<u>AREA OF ORIGIN</u>				
Hallway, Corridor	87	15	2	4,435,974
Stairway, Exterior	24	--	--	152,027
Stairway, Interior	50	1	--	2,194,989
Escalator	1	--	--	83,000
Lobby, Entrance Way	55	7	3	1,223,885
Elevator	4	--	--	159,923
Means of Egress, Unclassified	33	--	--	152,938
Large Assembly Area, Fixed Seats	5	--	--	13,550
Large Assembly Area, Non-Fixed Seats	8	1	--	750,760
Small Assembly Area	17	1	--	182,875
Lounge, Living Room	710	69	18	14,671,181
Sales, Show Room Area	25	2	--	923,391
Library, Museum	1	--	--	1,000
Sports Facility	5	--	--	306,835
Covered Court, Atrium, Mall, Concourse	2	1	--	5,600
Assembly, Sales Area, Unclassified	6	--	--	348,750
Sleeping (Under 5 Occupants)	488	44	18	6,988,183
Sleeping (5 or More Occupants)	13	2	5	480,586
Dining Area	47	9	2	1,644,804
Bar, Beverage Area	6	--	--	1,051,416
Washroom, Locker Room	96	7	1	2,225,357
Office	52	2	--	4,612,534
Laboratory	7	--	--	88,392
Display Windows	1	--	--	450
Printing and Photographic Reproduction	2	1	--	34,483
Kitchen, Cooking Area	898	64	6	12,399,182
Laundry Area	128	6	--	1,743,237
First-Aid, Treatment Area	2	--	--	200,050
Electronic Equipment Room	7	--	--	985,647
Performance Area	1	--	--	200
Backstage, Dressing Room	3	--	--	10,030
Process, Manufacturing Area	42	2	--	2,330,272
Function Area, Unclassified	28	3	--	1,775,786
Product Storage Area	58	4	2	12,635,418
Closet, Lockers	54	12	3	1,748,433
Supplies, Equipment Area	73	5	1	7,652,601
Records Storage Area	7	--	--	104,267
Shipping, Receiving Area, Mail Room	15	--	--	699,985
Trash, Rubbish Area	21	1	--	341,343
Vehicle (Garage)	207	8	1	3,251,739
Agricultural Products Storage	24	--	--	276,279
Storage Area, Unclassified	134	3	1	6,976,963
Dumbwaiter, Conveyor Shaft	5	--	--	32,700
Service Shaft	1	--	--	15,000
Chute	3	--	--	8,200
Shipping, Receiving Area	1	--	--	50
Duct, Heating, Air Conditioning	5	--	--	129,125
Duct, Cooking	2	--	--	30,360
Laboratory Fume Exhaust	3	--	--	18,613
Chimney, Flue Pipe, Gas Vent	90	--	--	1,671,421
Service Facilities, Unclassified	5	--	--	102,346

FIRE LOSS STATISTICS FOR ALL FIRES, 1982

	Incidents	Injured	Dead	\$ Loss
<u>AREA OF ORIGIN (con't)</u>				
Machinery Room	34	1	--	2,797,704
Heating Equipment Room	132	9	1	3,184,348
Transformer Vault	13	1	1	6,422,400
Incinerator Room	4	2	--	2,912,441
Maintenance Shop	71	11	1	3,351,712
Paint Shop	3	--	--	195,100
Service and Equipment Area, Unclassified	21	1	--	453,850
Crawl Space	58	3	--	2,095,237
Exterior Balcony	46	5	1	1,140,330
Ceiling and Floor Assembly	40	1	--	1,133,620
Ceiling and Roof/Ceiling Space	97	3	--	2,783,020
Assembly	53	1	--	1,393,258
Exterior Wall	129	5	--	921,196
Exterior Roof	70	2	--	576,143
Awning, Canopy	6	1	--	93,150
Structural Area, Unclassified	35	2	--	1,835,273
Vehicle, Engine Area	1,253	8	2	5,850,638
Vehicle, Fuel Area	243	3	--	1,199,934
Vehicle, Control Area	101	2	--	1,180,662
Vehicle, Passenger Area	505	10	1	1,647,235
Vehicle, Cargo Area	87	6	--	599,047
Vehicle Area, Unclassified	149	6	2	1,422,018
Open Area	178	9	--	1,506,068
Court, Patio, Terrace	51	1	--	262,230
Parking Area	48	1	--	532,711
Storage Area	34	1	--	609,398
Trash, Rubbish Area	45	2	--	97,551
Outside Area, Unclassified	149	2	--	2,459,947
Area of Origin Unknown	406	6	1	10,766,337
<u>PROPERTY CLASSIFICATION</u>				
<u>Assembly</u>				
Legitimate Theatre	4	--	--	141,000
Motion Picture Theatre	2	--	--	21,000
Theatre, Studio, Auditorium, Unclassified	2	--	--	303,000
Bowling Alley	2	--	--	500,000
Billiard Centre	1	--	--	108,000
Ice Rink	7	--	--	3,763
Ballroom, Gymnasium	7	--	--	168,066
Exhibition Hall, Expositon Hall	7	--	--	118,150
Amusement, Recreation Place, Unclassified	12	1	--	78,250
Nursery School, Kindergarten	1	--	--	25,640
Elementary School	29	--	--	328,267
High School	34	--	--	3,203,903
Rehabilitation School	1	--	--	40,000
College, University	10	--	--	33,750
Educational Facility, Unclassified	2	--	--	1,500
Church, Chapel	7	1	--	398,469
Church Hall	11	--	--	1,620,315
Church, Funeral Parlour, Unclassified	1	--	--	65,000
City Club	7	1	--	808,293
Country Club	2	--	--	2,538,000
Social, Sport Club, Unclassified	7	--	--	133,756
Historic Building	1	--	--	100
Restaurant	64	3	--	3,548,885
Night Club	10	4	--	2,436,588
Tavern	9	--	--	1,751,947
Lunchroom, Drive-In	10	6	--	158,228
Food or Beverage Establishment, Unclassified	4	--	--	52,709
Heliport, Helistop	2	1	--	380,200
Railway Station	2	--	--	3,000
Miscellaneous Assembly, Unclassified	3	--	--	85,450
<u>Institutional</u>				
Prison, Penitentiary for Men	2	--	--	30,025
Prison, Penitentiary for Women	1	--	--	60
Jail	2	--	--	54,062
Reformatory, Juvenile Detention Home	2	--	--	1,350
Vocational Rehabilitation Centre	2	--	--	2,250
Police Station, with Lock-up Facilities	3	--	--	300

FIRE LOSS STATISTICS FOR ALL FIRES, 1982

	Incidents	Injured	Dead	\$ Loss
<u>PROPERTY CLASSIFICATION (con't)</u>				
<u>Institutional (con't)</u>				
Home for the Aged with Nursing Staff	11	--	--	16,245
Home for the Aged without Nursing Staff	4	--	--	15,600
Home for the Aged, Unclassified	2	--	--	724
Child-Care Hospital	1	--	--	2,200
Children's Day Care	3	--	--	88,050
Child Care, Unclassified	1	--	--	--
Hospital	17	4	--	30,413
Sanatorium, Sanatarium, Nursing or Convalescent Home	4	--	--	40,250
Clinic	1	--	--	200,000
Miscellaneous Institutional, Unclassified	3	--	--	3,134
<u>Residential</u>				
Dwelling, Year-Round Use (1-Family)	2,348	119	32	42,484,526
Dwelling, Seasonal Use - In Season (1-Family)	54	--	--	863,022
Dwelling, Seasonal Use - Off Season (1-Family)	10	1	--	164,341
Dwelling, Year-Round Use (2-Family)	142	11	6	2,128,454
Dwelling, Seasonal Use - In Season (2-Family)	2	--	--	300
Dwelling, Farm (1-Family)	19	--	--	841,994
Dwelling, 1 & 2 Family, Unclassified	18	--	--	286,156
Apartment Tenement, Flat	16	--	--	133,025
Apartment, Tenement, Flat, 1 or 2 Units Without Business	16	1	--	296,774
Apartment, Tenement, Flat, 3 to 20 Units With Business	78	20	1	1,614,773
Apartment, Tenement, Flat, 3 to 20 Units Without Business	176	26	3	1,889,571
Apartment, Tenement, Flat, Over 20 Units	261	32	9	2,584,014
Apartment, Tenement, Flat, Unclassified	11	--	--	85,727
Rooming, Boarding, Lodging House, 4 to 8 Roomers or Boarders	11	--	--	126,175
Rooming, Boarding, Lodging House, 9 to 15 Roomers or Boarders	3	--	--	75,900
Rooming, Boarding, Lodging House, Unclassified	2	--	--	4,000
Hotel, Inn, Lodge, Year-Round Use	111	37	8	4,264,193
Hotel, Inn, Lodge, Seasonal Use - In Season	1	--	--	2,383
Hotel, Inn, Lodge, Transient Dormitory Type	4	--	--	950
Hotel, Inn, Lodge, Unclassified	22	5	1	703,632
Motor Hotel, Motel, Fewer than 3 Units	2	--	--	11,200
Motor Hotel, Motel, 3 - 20 Units	20	1	--	811,889
Motor Hotel, Motel, Over 20 Units	13	3	--	112,597
Motor Hotel, Motel, Unclassified	5	--	--	151,783
Dormitory, Convent, Monastery or Other Religious Dormitory	1	--	--	200
Dormitory, Bunkhouse and Workers' Barrack	5	--	--	155,100
Mobile Home (1 or 2 Family Unit)	136	13	2	2,764,495
Houseboat	3	--	--	66,500
Travel Trailer	31	6	--	260,814
Camping Trailer	11	2	--	70,850
Motor Home	33	2	--	434,207
Truck with Camper	24	3	1	92,864
Mobile Home, Trailer, Unclassified	22	3	--	391,036
Children's Play House	3	--	--	8,325
Residential Miscellaneous, Unclassified	22	--	--	322,424
<u>Business and Personal Service</u>				
General Business Office	30	--	--	1,842,135
Civil, Federal or Provincial Government Office	6	--	--	25,150
Bank	2	--	--	4,400
Medical, Health, Research or Scientific Office	7	--	--	126,350
Engineering, Architectural and Technical Office	1	--	--	4,276
Post Office	3	--	--	67,500
Office, Unclassified	7	--	--	99,500
Barber or Hairdressing Establishment	3	--	--	81,330
Beauty Parlour	1	--	--	10,800
Electronic Data Processing Centre	1	--	--	50
Miscellaneous Business and Personal Service, Unclassified	6	--	--	403,472

FIRE LOSS STATISTICS FOR ALL FIRES, 1982

	Incidents	Injured	Dead	\$ Loss
<u>PROPERTY CLASSIFICATION (con't)</u>				
<u>Mercantile</u>				
Supermarket	8	--	--	217,371
Market, Grocery Store	20	--	--	1,727,095
Specialty Food Store	5	--	--	655,138
Delicatessen	2	--	--	58,275
Food, Beverage Sale, Unclassified	3	--	--	156,619
Clothing Store	1	--	--	227
Clothing Accessories, Shoe Store	1	--	--	66,976
Fur Store	1	--	--	11,000
Dry Goods Store	2	--	--	357,224
Furniture Store	8	--	--	120,070
Appliance Store	2	--	--	113,815
Wallpaper, Paint Store	1	--	--	112,814
Rug, Floor Covering Store	1	--	--	1,000
Furniture, Appliance Hardware Sales, Unclassified	1	--	--	500
Book, Stationery Store	1	--	--	100
Newsstand, Tobacco Shop	1	--	--	140,000
Drug Store	2	--	--	10,300
Jewelry Store	1	--	--	3,500
Gift Shop	1	--	--	12,500
Leather Goods Shop	1	--	--	354,217
Florist Shop, Greenhouse	1	--	--	2,900
Books, Newspapers, Drugs, Unclassified	3	--	--	370
Sporting Goods Sales, Bicycle Sales and Repairs	3	1	--	350
Photographic Supply sales and Studios	1	--	--	50
Retail Lumber Sales	2	--	--	1,117,688
Pet Store, Animal Hospital	1	--	--	4,000
Art Supply Sales	1	--	--	1,000
Appliance Repair Shop	1	--	--	70,000
Laundry, Self-Service	5	--	--	9,657
Laundry, Dry Cleaner	3	--	--	3,050
Home Maintenance Service	1	--	--	190,000
Maintenance Shop, General	12	3	1	789,223
Household Repair Service, Unclassified	1	--	--	16,480
Service Station, Public	14	--	--	133,121
Service Station, Private	2	--	--	316,019
Motor Vehicle Repairs	33	1	--	1,520,580
Motor Vehicle and Trailer Sales	1	--	--	700
Motor Vehicle Accessory Sales	3	--	--	577,826
Car Wash Facility	1	--	--	300
Motor Vehicles, Boats, Sales and Service, Unclassified	64	1	--	670,419
Department Store	3	3	--	19,100
Variety Store, Small	8	1	--	528,383
Variety Store, Large	2	--	--	4,726
Shopping Mall, Public Areas	5	--	--	881,611
Department, Variety Store, Unclassified	2	--	--	289,833
Trade Supply Sales	3	--	--	102,384
Builders Supply Sales	3	--	--	28,550
Restaurant Supplies and Services	1	--	--	225,000
Miscellaneous Mercantile, Unclassified	10	--	--	1,390,001
<u>Industrial Manufacturing Properties</u>				
Basic Industrial Chemicals Manufacture	1	--	--	10,000
Hazardous Chemicals Manufacture	3	1	--	5,700
Paints, Varnishes, Lacquers, Inks, Waxes, Adhesives Manufacture	2	2	--	910,500
Petroleum Refineries	1	--	--	100,000
Asphalt, Coal Products Manufacture	2	--	--	1,050
Chemicals, Petroleum, Paints, Plastics, Manufacture, Unclassified	2	--	--	750,200
Sawmill, Planing Mill	61	4	1	7,683,654
Wood, Cane Container, and Small Wares Manufacture	1	--	--	100
Wood, Cork Products Manufacture	3	--	--	22,593
Furniture, Bedding Manufacture	4	--	--	233,868
Paper, Pulp, Paperboard Manufacture	6	--	--	222,972
Paper, Pulp, Paperboard Products Manufacture	2	--	--	10,075
Newspaper, Magazine, Printing and Publishing	2	--	--	70,275
Printing, Publishing	1	--	--	36,000
Wood, Furniture, Paper, Printing, Manufacture, Unclassified	1	--	--	110,000

FIRE LOSS STATISTICS FOR ALL FIRES, 1982

	Incidents	Injured	Dead	\$ Loss
<u>PROPERTY CLASSIFICATION (con't)</u>				
<u>Industrial Manufacturing Properties (con't)</u>				
Basic Nonferrous Metals Manufacture	1	1	--	200,000
Basic Metal Products Manufacturing	9	--	--	211,500
Machinery Manufacture	4	--	--	105,400
Electrical and Electronic Machinery Manufacture	1	--	--	3,000
Electrical and Electronic Appliance Manufacture	2	--	--	11,670
Metal, Metal Products, Electrical Equipment Manufacture, Unclassified	2	--	--	5,416
Slaughtering, Preparation, Preserving of Meat	4	--	--	213,400
Canning, Preserving of Fish, Sea Foods	1	--	--	100
Grain Mill Products Manufacturing	2	--	--	15,100
Bakery Product Manufacturing	4	--	2	258,900
Food Processing, Unclassified	3	--	--	13,219
Wool, Blended and Other Fibres, Spinning and Weaving	1	1	--	1,237,000
Textile Finishing	1	--	--	500
Textile Goods Manufacturing	1	--	--	350
Rubber, Rubber Products Manufacturing	2	--	--	168,000
Shipbuilding and Repairing of Vessels Over 20M	8	1	--	509,145
Boatbuilding and Repairing of Vessels 20M and Under	8	--	--	150,265
Railway Equipment Manufacturing, Assembly and Repair	2	--	--	32,500
Motor Vehicle Manufacturing and Assembly	1	--	--	8,000
Aircraft and Rocket Manufacturing, Assembly and Repair	1	--	--	43,700
Vehicles and Related Equipment, Unclassified	50	1	--	620,828
Instrument Manufacturing	1	--	--	20,500
Laundry and Dry Cleaning Plant	1	--	--	3,879
Miscellaneous Manufacturing, Unclassified	9	--	--	355,581
<u>Industrial Storage Properties</u>				
Seeds, Beans, Nuts, Grain Storage in Bulk	8	--	--	624,600
Livestock Storage	4	--	--	131,236
Agricultural Supply Storage	8	--	--	361,146
Agricultural Products Storage, Unclassified	6	--	--	14,550
Wearing Apparel, Garments and Finished Textiles Storage	2	--	--	7,871
Packaged Foodstuffs Storage	1	1	--	90,000
Canned, Bottle Food or Soft Drinks Storage	1	--	--	71,000
Flammable Liquids Tank Storage	2	--	--	1,171,500
LP Gas Bulk Plant Storage	1	--	--	20,000
LP Gas Cylinders Storage	2	1	--	520
Flammable Liquids, Gases, Petroleum Product Storage, Unclassified	1	--	--	150
Lumberyards, Building Materials Storage	9	2	--	568,262
Wood Products Storage	2	--	--	1,000
Furniture Storage	1	--	--	90
Paper and Paper Products Storage	4	--	--	37,400
Felled Timber, Log Storage	2	--	--	16,650
Wood, Furniture, Paper and Products Storage, Unclassified	2	--	--	385
Hazardous Chemicals Storage	1	--	--	110,784
Plastics and Plastic Products Storage	1	--	--	1,513,560
Rubber, Rubber Products Storage	1	--	--	--
Chemicals, Plastics, Paints Storage, Unclassified	1	--	--	30,000
Basic Metal Forms Storage	2	--	--	3,500
Hardware Storage	2	--	--	9,300
Electrical Appliances and Supplies Storage	2	--	--	6,800
Scrap and Junkyards	2	--	--	97,000
Metal Products, Machinery, Electrical Appliance Storage, Unclassified	3	--	--	264,000
Garage, Individual Residential Parking	127	7	1	709,076
Garage, General Auto Parking	25	--	--	153,618
Bus, Truck and Auto Fleets Storage	6	--	--	378,300
Heavy Machine and Equipment Storage	6	--	--	381,528
Marinas, Boat and Ship Storage	9	1	--	76,000
Aircraft Hangar	1	--	--	6,000
Fire Stations	2	--	--	65,300
Vehicle Storage, Unclassified	4	--	--	2,810
General Warehouse	22	1	--	5,115,928
Freight Terminal	1	--	--	200
Glass and Glass Products Storage	1	--	--	658
Ice Storage	2	--	--	392,250
Miscellaneous Storage Properties, Unclassified	24	--	--	474,791

FIRE LOSS STATISTICS FOR ALL FIRES, 1982

	Incidents	Injured	Dead	\$ Loss
<u>PROPERTY CLASSIFICATION (con't)</u>				
<u>Outdoor Property, Vehicles</u>				
Brush, Grass and Light Ground Cover	15	2	--	93,945
Dumps	1	--	--	20,000
Trees	46	--	--	25,645
Fences, Poles, Railroad Ties	15	--	--	5,022
Trash and Rubbish	24	--	--	3,435
Mailboxes	1	--	--	300
Forest, Standing Timber	4	--	--	143,487
Outdoor Property, Unclassified	55	5	--	55,328
Bridge, Trestle, Overpass, Elevated Road and Railway	4	--	--	2,160,100
Buildings Under Construction	13	--	--	3,722,350
Buildings Under Demolition	2	--	--	600
Vacant Property	20	--	--	236,785
Unoccupied Property	6	--	--	187,400
Contractors' Sheds	3	--	--	13,500
Building Under Major Renovation	1	--	--	8,000
Under Construction or Demolition, Unclassified	9	--	--	186,230
Motor Craft (20M and Under LOA)	28	6	--	546,972
Vessel (Under 1,000GT)	7	--	--	1,552,880
Ship, Combat	1	--	--	1,200
Commercial Fishing Vessel	28	1	2	1,613,777
Watercraft, Unclassified	12	--	--	478,310
Railway Car, Passenger Sleeper	2	1	--	40,000
Railway Car, Freight	4	--	--	175,520
Rail Transport Vehicle and Equipment, Unclassified	1	--	--	6,850
Automobile	1,591	11	1	3,233,493
Bus, Trackless Trolley	10	--	--	102,590
Truck, Compressed or LP Gas Tank	5	--	--	15,850
Truck, Flammable Liquid, Chemical Tanker	3	--	--	54,600
Truck, General	381	4	--	1,737,281
Motorcycle	23	--	--	41,470
Wagon, Non-Motorized Hauling Vehicle	7	--	--	58,486
Industrial or Commercial Trailer	28	1	1	603,162
Ground Transport Vehicle, Unclassified	85	2	1	469,084
Construction Equipment	39	--	--	1,522,729
Farm Tractor and Equipment	16	1	--	160,413
Crane, Mobile and Fixed	1	--	--	67,250
Industrial Truck, Fork Lift and Material Handling	14	--	--	146,557
Snowmobile	4	--	--	8,100
Special Vehicle, Unclassified or Unknown	29	--	--	1,009,314
<u>Miscellaneous</u>				
Pier, Wharf	1	--	--	100,000
Miscellaneous Special, Unclassified	4	--	--	41,996
Poultry, Egg Production	5	--	--	67,840
Cow and Cattle Production	4	--	--	402,420
Storage Barn	42	--	--	984,934
Animal Barn, Cattle, Pigs, Horses	13	--	--	212,153
Farm Silo	1	--	--	200,000
Farm Facility, Unclassified	9	--	--	378,115
Shed	64	--	--	340,732
Privy	2	--	--	1,400
Toll Station or Booth	1	--	--	250
Awning, Canopy	3	--	--	5,900
Root Cellar	1	--	--	1,000
Conveyor	2	--	--	2,200
Miscellaneous Outbuildings, Unclassified	28	1	--	103,222
Electrical Light and Power Generating Plant	3	--	--	16,500
Electric Light and Power Distribution System	3	--	--	6,000,680
Water Supply System	5	--	--	88,450
Utility, Unclassified	4	--	--	27,100
Cement Manufacturing	1	--	--	100
Cement Batch Mixing Plant	2	--	--	248,438
Metal Ore Mine	1	--	--	25,000
Petroleum, Natural Gas Well with Accompanying Reservoir	1	--	--	42,000
Stone, Slate, Clay, Gravel, Sand, Quarry or Pit	2	--	--	66,300
Communications, Unclassified	1	--	--	1,500
Nucleonics, Unclassified	2	--	--	75
Groundskeeping Equipment	2	--	--	12,000
Property Classification Unknown	90	--	--	729,556

	Incident	Injured	Dead	\$ Loss
IGNITING OBJECT				
No Igniting Object	182	6	1	7,516,400
Stove, Range, Top Burner Area - Fire in Pan	344	20	1	2,066,284
Stove, Range, Top Burner Area - Fire in Deep Fat Fryer or Pot	159	14	2	1,105,672
Stove, Range, Top Burner Area - Other Circumstances	87	14	2	1,047,140
Oven of Stove, Range	42	4	--	164,254
Chafing Dish, Fondue	4	--	--	3,099
Deep Fat Fryer, Separate Appliance	23	5	--	340,995
Fry Pans, Grills Not on Stove	14	1	--	55,343
Other Cooking Unit	24	2	--	189,648
Open Fired Broiler, Fixed Type	5	--	--	54,939
Open Fired Broiler, Portable Type	41	5	--	890,600
Food Warming Appliance	29	5	--	150,022
Toaster, Waffle Iron	21	--	--	153,026
Cooking Equipment, Unclassified	23	1	--	480,706
Central Heating Unit	100	6	--	2,523,418
Service Water Heater	42	12	1	1,476,191
Space Heater, Stationary	160	4	1	3,143,435
Space Heater, Portable	69	7	--	3,818,890
Fireplace	160	1	--	2,263,682
Chimney, Masonry	83	1	--	1,377,299
Flue Pipe, Vent Connector	29	--	--	407,168
Chimney, Factory-Built, Metal	92	2	--	2,263,225
Heating Equipment, Unclassified	34	--	--	717,727
Television	26	6	--	591,910
Radio, Phonograph, Tape-Recorder	12	--	2	163,880
Clothes Dryer	67	1	--	500,073
Washing Machine	2	--	--	265
Air Conditioning or Dehumidifier, Individual	1	--	--	3,000
Refrigeration Unit, Individual	28	2	--	278,000
Pressing Iron, Ironing Machine	10	--	--	116,207
Portable Generator	3	--	--	20,150
Lawnmower	2	--	--	450
Electric Blanket, Heating Pad	14	--	1	259,424
Incinerator	6	2	--	25,613
Appliance, Unclassified	38	3	--	881,766
Electrical Wiring, Cable, Permanent	519	10	--	5,105,196
Transformer	8	1	1	116,547
Switch Gear	2	--	--	25,700
Panelboard, Switchboard	30	3	--	417,833
Switch, Outlet	31	1	1	587,359
Electric, Wiring, Cable, Temporary	111	5	3	2,824,185
Signal, Telephone Equipment	4	--	--	5,920
Battery, Rectifier, Charger	205	--	--	774,847
Electrical Distribution Equipment, Unclassified	47	--	--	455,891
Electric Motor, H.P. and Over	35	3	--	231,249
Electric Motor, Under 1 H.P.	22	2	--	177,205
Electronic Equipment, Communications	2	--	--	231,000
Electronic Equipment, Data Processing	5	--	--	1,800
Incandescent Lamp	62	9	--	932,244
Fluorescent Lamp	14	--	--	186,802
Other Electrical Equipment, Unclassified	35	--	--	982,251
Smoker's Material, Cigarette, Cigar, Pipe, Matches, Lighter	661	60	25	7,980,387
Match, Lighter, Not Used in Conjunction with Smoking	813	48	5	14,205,570
Lamp	13	1	--	135,438
Candle Taper	53	2	--	1,071,711
Cutting Torch	35	6	--	543,642
Welding Equipment	42	2	1	351,847
Torch, Other than Cutting, Welding	65	2	--	991,855
Hot Ashes, Embers	87	2	1	800,543
Smoker's Material or "Open" Flame, Unclassified	96	11	1	1,231,068
Structure, Attached	7	--	--	124,558
Structure, Detached	105	4	--	1,568,668
Outside Storage Container, Tank	5	--	--	145,500
"Open" Fire	60	--	--	731,521
Forest, Tree	6	--	--	478,815
Grass, Bush	30	--	--	272,142
Exposure, Unclassified	36	--	--	536,040
Internal Combustion Engine	782	7	1	2,674,412
Heat Treatment Equipment	5	1	--	64,087
Industrial Oven	5	--	--	2,805,200
Printing Equipment, Photographic Equipment	1	--	--	20,000
Explosive	2	--	--	6,010,000
Fireworks	18	--	--	18,651
Bearing, Belting, Conveyor, Brake	14	--	--	46,900
Machinery, Equipment, Commercial and Industrial	28	2	--	1,058,144
Chemical Reaction	29	--	--	981,928
Igniting Object, Unclassified	138	6	1	1,545,639
Igniting Object, Unknown	1,379	63	22	62,796,492

FIRE LOSS STATISTICS FOR ALL FIRES, 1982

	Incident	Injured	Dead	\$ Loss
<u>SPRINKLER PROTECTION</u>				
Complete Sprinkler Protection, Supervised or Standard Watchman	40	6	--	284,945
Complete Sprinkler Protection, Alarm to Fire Department	30	--	--	224,451
Complete Sprinkler Protection, Unsupervised Local Alarms Only	129	10	1	808,672
Partial Sprinkler Protection, Supervised or Standard Watchman	29	3	--	1,092,125
Partial Sprinkler Protection, Alarm to Fire Department	36	1	--	306,574
Partial Sprinkler Protection, Unsupervised, Local Alarms Only	152	28	7	6,360,695
No Sprinkler Protection	3,657	260	53	118,755,510
Not Applicable, eg Vehicle Outside Area, Etc.	3,045	64	9	24,716,665
Sprinkler Protection, Unclassified	28	--	--	245,830
Sprinkler Protection Unknown	477	3	3	4,501,221
<u>TIME OF FIRE</u>				
Time 0000 - 0059 Hours	272	12	8	9,386,211
Time 0100 - 0159 Hours	320	37	5	18,540,416
Time 0200 - 0259 Hours	337	33	3	10,954,452
Time 0300 - 0359 Hours	294	13	8	6,353,711
Time 0400 - 0459 Hours	251	11	5	13,092,771
Time 0500 - 0559 Hours	200	16	4	6,554,427
Time 0600 - 0659 Hours	145	9	6	2,853,907
Time 0700 - 0759 Hours	165	18	--	3,547,231
Time 0800 - 0859 Hours	212	10	--	4,073,276
Time 0900 - 0959 Hours	230	13	1	2,631,716
Time 1000 - 1059 Hours	284	11	3	3,537,889
Time 1100 - 1159 Hours	340	18	--	3,808,064
Time 1200 - 1259 Hours	323	11	--	7,613,156
Time 1300 - 1359 Hours	385	12	--	4,248,436
Time 1400 - 1459 Hours	348	12	2	3,989,806
Time 1500 - 1559 Hours	366	9	1	5,503,023
Time 1600 - 1659 Hours	402	21	1	4,918,438
Time 1700 - 1759 Hours	390	12	1	6,838,705
Time 1800 - 1859 Hours	405	14	2	3,541,561
Time 1900 - 1959 Hours	353	11	--	5,867,332
Time 2000 - 2059 Hours	363	17	4	5,322,362
Time 2100 - 2159 Hours	335	13	1	4,366,258
Time 2200 - 2259 Hours	298	18	9	9,600,407
Time 2300 - 2359 Hours	342	23	9	7,646,315
Time Unknown	263	1	--	2,506,818
<u>DAY OF WEEK</u>				
Sunday	1,058	64	12	19,801,052
Monday	964	44	11	21,669,297
Tuesday	1,046	43	9	18,280,575
Wednesday	1,101	57	5	22,853,320
Thursday	1,113	42	8	20,377,945
Friday	1,170	54	16	29,131,178
Saturday	1,171	71	12	25,183,321

CIRCUMSTANCES CONTRIBUTING TO FIRE CASUALTIES, 1982

	Incidents	Injured	Dead	\$ Loss
<u>CONDITION OF CASUALTY</u>				
Asleep at Time of Fire	67	81	27	3,662,555
Bedridden or Other Physical Handicap	6	3	3	261,181
Impairment by Alcohol, Drugs or Medication	28	21	8	340,264
Awake or No Physical Or Mental Impairment at Time of Fire	122	139	7	5,788,089
Too Young to React to Fire	4	2	3	119,500
Left Unattended (Infant)	3	1	3	47,670
Condition of Casualty Unknown	49	53	18	4,301,275
Condition of Casualty, Unclassified	65	75	4	1,097,732
<u>ACTION OF CASUALTY</u>				
Injured While Attempting to Escape	43	59	13	3,347,280
Over Exertion or Heart Attack	1	2	--	170,692
Voluntarily Entered or Remained for Rescue Purpose	16	18	--	879,658
Voluntarily Entered or Remained for Fire Fighting	92	105	3	5,830,798
Voluntarily Entered or Remained to Save Personal Property	13	14	--	172,075
Loss of Judgement or Panic	21	16	7	456,114
Received Delayed Warning	13	14	2	386,756
Did Not Act	32	18	19	497,138
Action of Casualty Unknown	79	69	25	5,103,099
Action of Casualty, Unclassified	50	60	4	2,820,757
<u>IGNITION OF FABRIC</u>				
Outer Clothing	53	52	12	1,064,802
Sleepwear	12	9	4	340,875
Underclothing	4	4	--	307,500
Bedding and Bed Linen	13	9	4	178,456
Mattress or Pillow	8	4	5	100,900
Upholstered Furniture	19	13	6	362,940
Rugs	2	3	--	15,597
Ignition of Clothing or Fabrics, Not Applicable	209	262	30	14,073,879
Ignition of Clothing or Fabrics, Unclassified	15	19	12	800,235
<u>TYPE OF FABRIC</u>				
Cotton	28	24	7	674,076
Wool	4	4	1	59,010
Synthetic Fibre	29	27	5	422,675
Mixture Fibres	35	25	15	888,472
Plastic or Plastic Foam	3	3	--	30,600
Type of Fabric or Material, Not Applicable	220	268	33	14,377,940
Type of Fabric or Material Ignited, Unclassified	17	24	12	881,411
<u>CAUSE OF FAILURE TO ESCAPE</u>				
Trapped by, Rapid Spread of Fire, Smoke Through Vertical Openings	12	11	4	644,174
Trapped by, Rapid Spread of Fire, Smoke Through Horizontal Openings	22	25	15	2,077,736
High Flame Spread of Combustible Finish of Walls, Ceilings or Floors	11	7	10	1,214,333
Building Collapse	1	1	--	50,964
Falling Debris	4	7	--	469,248
Explosion	37	46	4	674,516
Outdoor Fire Includes Forest, Brush	3	4	--	12,500
Cause of Failure to Escape Unknown	113	108	32	6,975,547
Cause of Failure to Escape, Unclassified	140	166	8	6,324,852

SUMMARY OF FIRE LOSSES BY PROPERTY CLASSIFICATIONS, 1982

Property Group	No. of Fires	Percent of Total Fires	\$ Loss	Percent of Total \$ Loss	Injured	Percent of Total Injured	Dead	Percent of Total Dead
Assembly								
Educational	77	1.0	3,633,060	2.3	--	--	--	--
Nightclubs, taverns	19	.3	4,183,535	2.7	4	1.0	--	--
Restaurants, eating establishments	78	1.0	3,759,822	2.4	9	2.4	--	--
Others	87	1.1	7,473,812	4.8	4	1.0	--	--
Institutional								
Home for aged	17	.2	32,569	--	--	--	--	--
Hospital, child care, sanitarium	27	.4	360,913	.2	4	1.0	--	--
Others	15	.2	91,181	.1	--	--	--	--
Residential								
One- and two-family dwellings	2593	34.0	46,768,793	29.7	131	34.9	38	52.1
Apartments	558	7.3	6,603,884	4.2	79	21.1	13	17.8
Hotels, motels, rooming houses	194	2.5	6,264,702	4.0	46	12.3	9	12.3
Dormitory, bunkhouse	6	.1	155,300	--	--	--	--	--
Mobile home	169	2.2	3,198,702	2.0	13	3.5	2	2.7
Recreation vehicle	45	.6	394,164	.3	13	3.5	1	1.4
Others	68	.9	806,322	.5	3	.8	--	--
Business and personal service								
Mercantile	67	.9	2,664,963	1.7	--	--	--	--
Industrial manufacturing	253	3.3	13,017,062	8.3	10	2.7	1	1.4
Storage properties	211	2.7	14,354,940	9.1	11	2.9	3	4.1
Outdoor property, piers, wharves	301	3.9	12,907,763	8.2	13	3.5	1	1.4
Watercraft	165	2.2	2,507,262	1.6	7	1.9	--	--
Rail transport and equipment	76	1.0	4,193,139	2.7	7	1.9	2	2.7
Automobile	7	.1	222,370	.1	1	.3	--	--
Other ground transport and special vehicles	1591	20.7	3,233,493	2.1	11	2.9	1	1.4
Remainder	645	8.5	5,996,886	3.8	8	2.1	2	2.7
	354	4.6	14,467,051	9.2	1	.3	--	--
TOTALS	7623	100.	157,296,688	100.	375	100.	73	100.

LOSSES OF \$500,000 AND OVER, 1982

Date	Location	Property/Classification	Act or Omission	\$ Loss
82 01 01	Vancouver	Country Club	Unknown	2,425,000
82 01 13	Whistler	Building Under Construction	Misuse of Material Ignited	1,800,000
82 01 19	Central Coast R.D.	Flammable Liquids Tank Storage	Arson or Set Fire - Vandalism	1,170,000
82 01 28	Vancouver	Wool Textile Manufacturing	Arson or Set Fire - Cover Up Crime	1,237,000
82 02 05	Vernon	General Warehouse	Unknown	1,053,842
82 02 06	Vancouver	Church Hall	Arson or Set Fire - Cover Up Crime	800,000
82 02 06	Richmond	Plastics and Plastic Products	Arson or Set Fire - Financial Gain	1,513,560
82 02 17	White Rock	Market, Grocery Store	Arson or Set Fire - Cover Up Crime	1,082,186
82 02 26	Castlegar	Retail Lumber Sales	Unknown	650,000
82 03 03	Williams Lake	Church Hall	Arson or Set Fire - Cover Up Crime	500,000
82 03 07	Thompson-Nicola R.D.	Hotel	Human Failing - Unclassified	509,500
82 03 14	Richmond	Paints, Varnishes, Lacquers, Inks	Unknown	905,500
82 04 23	Columbia-Shuswap RD	Sawmill, Planing Mill	Miscellaneous Act or Omission	2,800,000
82 05 17	New Westminster	Hotel	Unknown	590,000
82 05 29	New Westminster	Bridge	Unknown	2,000,000
82 05 31	Nanaimo	Electric Light & Power Distribution	Arson or Set Fire - Vandalism	6,000,000
82 05 31	Fraser-Ft. Geo. RD	Sawmill, Planing Mill	Installed too Close to Combustible	500,000
82 06 01	Victoria	Restaurant	Unknown	700,000
82 06 12	Victoria	Motor Vehicle & Accessory Sales	Unknown	570,826
82 06 29	Port Hardy	Vessel (Under 1,000GT)	Unknown	1,500,000
82 06 30	Vancouver	General Warehouse	Unknown	2,954,831
82 07 19	Tahsis	Shopping Mall - Public Areas	Arson or Set Fire - Cover Up Crime	830,200
82 07 22	Kitimat	General Business Office	Arson or Set Fire - Financial Gain	1,293,200
82 08 11	Houston	Hotel	Unknown	990,000
82 08 13	Princeton	High School	Suspected Set Fire	3,017,178
82 09 12	Surrey	Sawmill, Planing Mill	Suspected Set Fire	1,025,000
82 09 28	Nelson	Night Club	Suspected Set Fire	794,000
82 09 30	Central Okanagan RD	Building Under Construction	Suspected Set Fire	1,783,000
82 10 29	Skeena-Queen Charlotte R.D.	Tavern	Arson or Set Fire - Cover Up Crime	600,000
82 11 08	Peace River Liard R.D.	Shipbuilding and Repairing of Vessels Over 20M	Unknown	500,000
82 11 22	Surrey	Miscellaneous Mercantile	Suspected Set Fire	615,000
82 12 05	Kelowna	Night Club	Unknown	964,000
82 12 24	Taylor	Chemicals, Petroleum Paints, Plastics Manufacture, Unclassified	Human Failing, Unclassified	750,000
82 12 28	Vancouver	Restaurant	Electrical Short Circuit	525,000
34 Incidents				44,948,823

10-YEAR PROPERTY FIRE LOSS COMPARISON, 1973 - 1982

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
(1) Number of Fires	7,613	7,526	7,782	7,433	7,523	7,441	7,655	7,605	7,023	7,623
(2) Loss	\$45,693,116	\$62,842,182	\$66,461,246	\$77,566,724	\$78,746,492	\$81,596,417	\$105,900,046	\$108,551,176	\$115,709,786	\$157,296,688
(3) Loss per fire (2) ÷ (1)	6,002	8,350	8,540	10,432	10,467	10,366	13,834	14,289	16,476	20,534
(4) Population (thousands)*	2,302.4	2,375.7	2,433.2	2,466.6	2,497.6	2,555.8	2,566.9	2,636	2,744	2,783
(5) Number of fires per 1,000 persons (1) ÷ (4)	3.31	3.17	3.20	3.01	3.01	2.91	2.98	2.88	2.56	2.52
(6) Per capita loss (2) ÷ (4)	\$19.85	\$26.45	\$27.31	\$31.45	\$31.53	\$31.92	\$41.25	\$41.22	\$42.17	\$56.51
(7) CPI adjustment factor +	.473	.528	.586	.643	.689	.743	.800	.875	1.000	1.105
(8) Loss adjusted by CPI (2) ÷ (7)	\$96,602,782	\$119,019,284	\$113,415,096	\$120,632,541	\$114,290,990	\$109,820,211	\$132,375,058	\$124,187,630	\$115,709,786	\$142,349,944
(9) Loss per fire adjusted by CPI (3) ÷ (7)	\$12,689	\$15,814	\$14,573	\$16,224	\$15,192	\$14,759	\$17,293	\$16,330	\$16,476	\$18,673
(10) Per capita loss adjusted by CPI (6) ÷ (7)	41.97	50.09	46.60	48.91	45.76	42.96	51.56	47.11	42.17	51.14
(11) Fire fatalities	116	129	129	110	94	98	125	77	76	73

* Population statistics were provided by Statistics Canada. The figures for 1976 and 1981 are actual census figures. The others are estimates by Statistics Canada.

+ Adjustment Factor. In an effort to get a more realistic picture of losses over the years, some form of adjustment factor was necessary to take inflation into consideration. We chose the Consumer Price Index for Vancouver with 1981 = 1.000.

CHART 1: Number of Fires 1973 - 1982

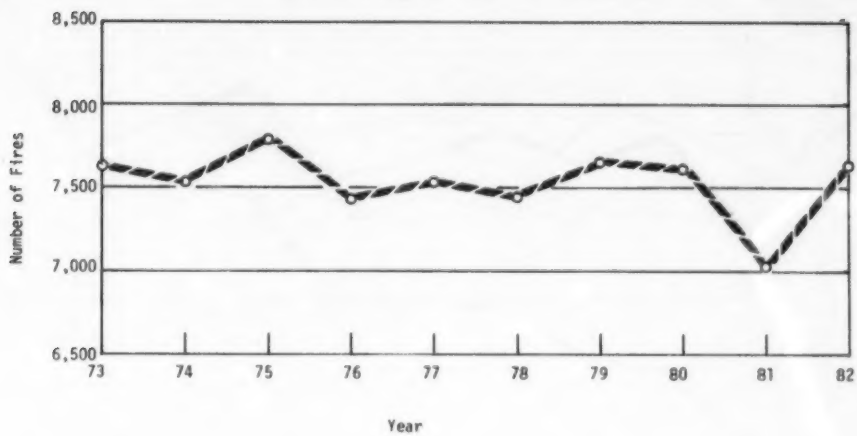


CHART 2: Number of Fires Per 1,000 Persons 1973 - 1982

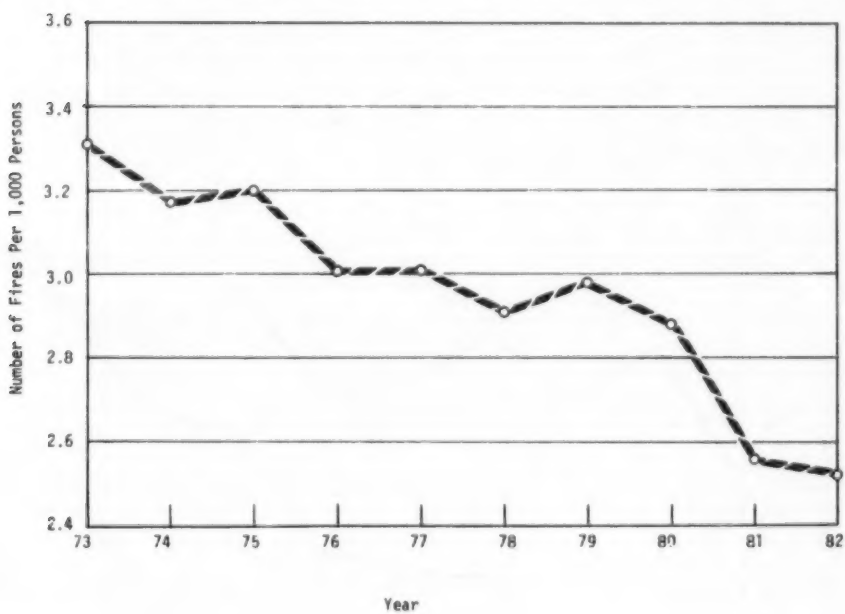


CHART 3: Annual Actual and Adjusted Fire Losses 1973 - 1982

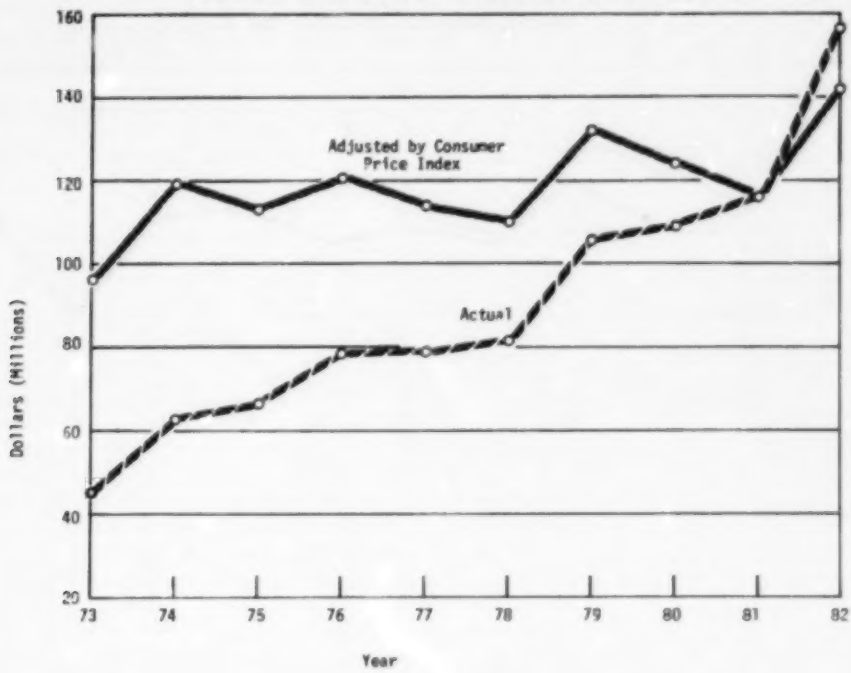


CHART 4: Actual and Adjusted Average Loss Per Fire 1973 - 1982

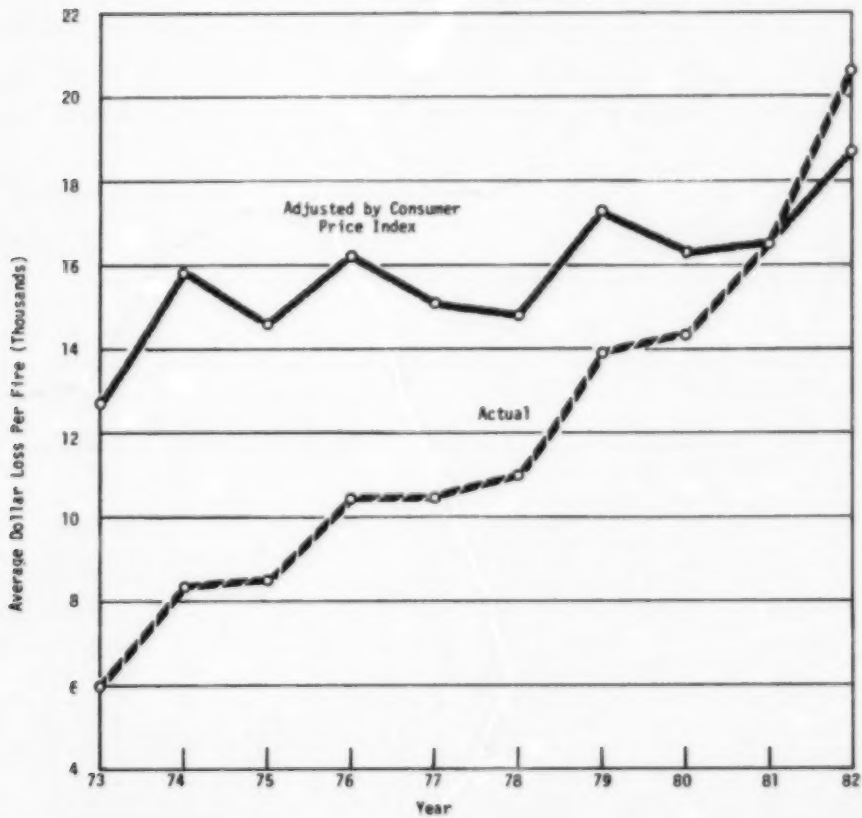


CHART 5: Actual and Adjusted Annual Per Capita Losses 1973 - 1982

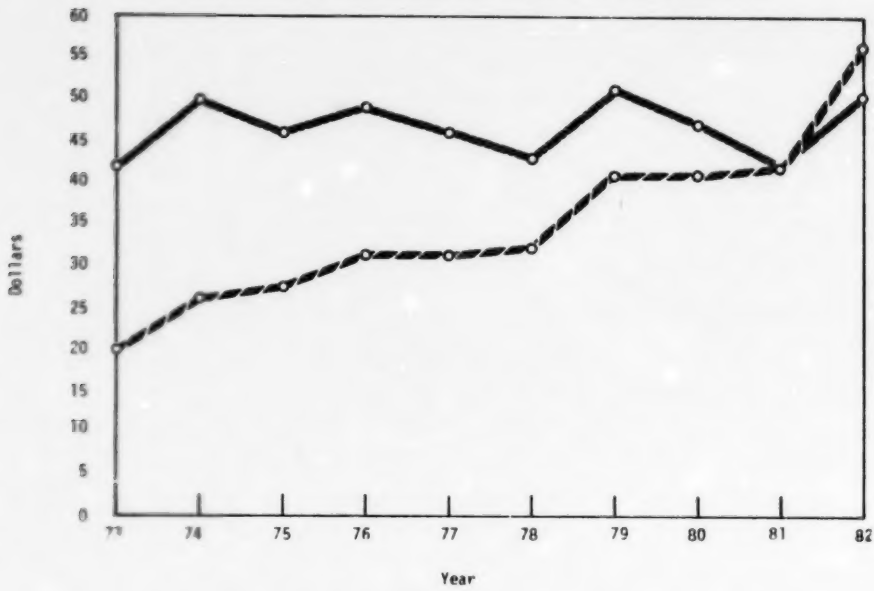
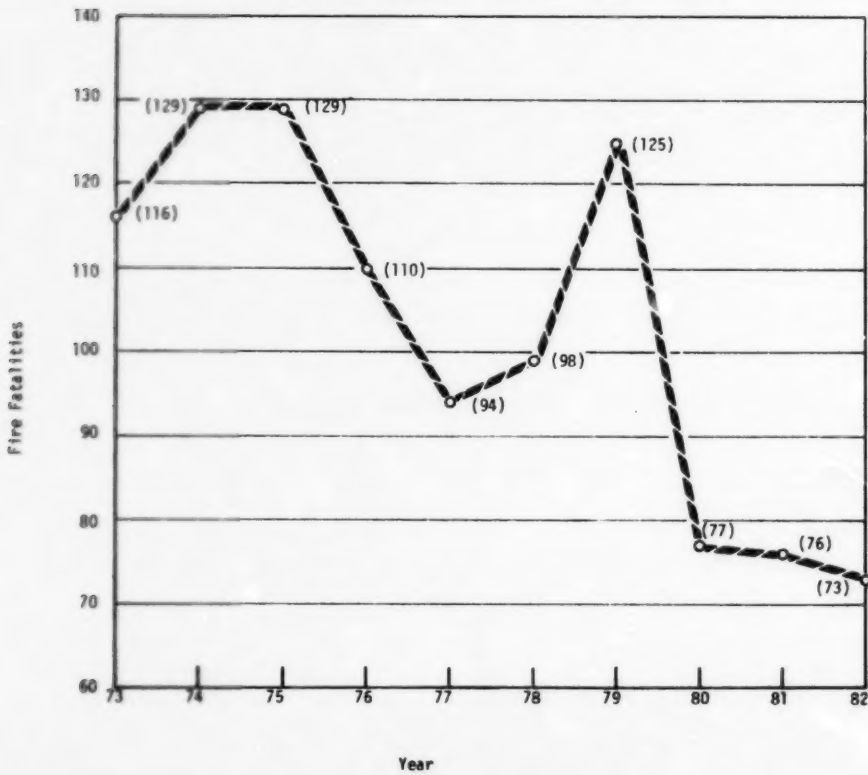


CHART 6: Annual Number of Fire Fatalities 1973 - 1982



POOR

QUALITY

ORIGINAL